



## Mahdi Salami Hosseini

Professor

College: Faculty of Polymer Engineering

Here is my research group page: [Research Group - Mahdi Salami hosseini \(sut.ac.ir\)](http://Research Group - Mahdi Salami hosseini (sut.ac.ir))

### Education

| Degree | Graduated in | Major               | University              |
|--------|--------------|---------------------|-------------------------|
| BSc    | 2001         | Polymer Engineering | Amirkabir Uni. of Tech. |
| MSc    | 2003         | Polymer Engineering | Amirkabir Uni. of Tech  |
| Ph.D   | 2008         | Polymer Engineering | Amirkabir Uni. of Tech. |

### Employment Information

| Faculty/Department             | Position/Rank | Employment Type | Cooperation Type | Grade |
|--------------------------------|---------------|-----------------|------------------|-------|
| Faculty of Polymer Engineering | Professor     | Tenured         | Full Time        | 22    |

### Conferences

- Iranian Conference pf Rheoloy (2023)

### Membership in Scientific Societies

1. Member of Iranian Polymer Association
2. Member of American Society of Chemistry
3. Member of Iranian Society of Rheology

## Papers in Conferences

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1. P. Mohammadzadeh Pakdel, M. Salami Hosseini, R. Yegani\*, H. Didari. Simulating the Morphology Development of Polymer Blends in the Spinneret. IChEC ۲۰۱۹, ۲۰۱۹.

## Papers in Journals

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1. Esmail Sharifzadeh, Mehdi Salami , Kalajahi, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh, Saeed Najafi, Roqaye Jannati, Zahra Hatef, Defining the characteristics of spherical Janus particles by investigating the behavior of their corresponding particles at the oil/water interface in a Pickering emulsion, Journal of Dispersion Science and Technology, 2017.
  2. Amir Fadaei, Mohammad Hossein Navid Famili, Mahdi Salami Hosseini. Prediction of Bubble Size Distribution in a Batch Foaming System of Polystyrene-Supercritical CO<sub>2</sub>. Iranian Journal of Polymer Science and Technology, ۲۰۲۳.
  3. Mahdi Salami Hosseini, Mohammad Ali Moeeni, Mirkarim Razavi Aghjeh, Mahdi Mostafaian. Droplet Deformation Between Two Moving Parallel Plates. Amirkabir Journal of Mechanical Engineering, ۲۰۲۰.
  4. Mostafa Salehi, Mahdi Salami Hosseini, Mostafa Rezaei. Modeling of bubble growth behavior in the PS/CO<sub>2</sub> batch foaming system using finite element method. Modares Mechanical Engineering, ۲۰۱۶.
  5. Seyyed , Mahdi Alavifar, Marzieh Golshan, Mahdi Salami Hosseini, Mehdi Salami , Kalajahi, Rhodamine B- and coumarin-modified chitosan as fluorescent probe for detection of Fe<sup>3+</sup> using quenching effect, Cellulose, 2024.
  6. Seyyed , Mahdi Alavifar, Marzieh Golshan, Mahdi Salami Hosseini, Mehdi Salami , Kalajahi, Starch/rhodamine 6G conjugate as a non-cytotoxic, effective, and selective fluorescent chemosensor for detection of Fe<sup>3+</sup> ion, Polymers from Renewable Resources, 2024.
  7. Seyedeh , Arefeh Safavi , Mirmahalleh, Marzieh Golshan, Behnam Gheitarani, Mahdi Salami Hosseini, Mehdi Salami , Kalajahi, A review on applications of coumarin and its derivatives in preparation of photo-responsive polymers, European Polymer Journal, 2023.
  8. Mahdi Madelatparvar, Mahdi Salami Hosseini, Chunwei Zhang, Polyurea micro-/nano-capsule applications in construction industry: A review, Nanotechnology Reviews, 2023.
  9. Behnam Gheitarani, Marzieh Golshan, Seyedeh , Arefeh Safavi , Mirmahalleh, Mehdi Salami , Kalajahi, Mahdi Salami Hosseini, Ali Akbar Alizadeh, Fluorescent polymeric sensors based on N-(rhodamine-G) lactam-N'-allyl-ethylenediamine and 7-(allyloxy)-2H-chromen-2-one for Fe<sup>3+</sup> ion detection, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023.
  10. Marzieh Golshan, Behnam Gheitarani, Mehdi Salami , & Kalajahi, Mahdi Salami Hosseini, Synthesis and characterization of fluorescence poly (amidoamine) dendrimer-based pigments, Scientific Reports, 2022.
  11. Behnam Gheitarani, Marzieh Golshan, Mahdi Salami Hosseini, Mehdi Salami , & Kalajahi, Reflectance and photophysical properties of rhodamine 6G/2-(4-methyl-2-oxo-2H-chromen-7-yloxy) acetic acid as cold hybrid colorant, Scientific Reports, 2022.
  12. Samaneh Dehghani, Mahdi Salami Hosseini, Ehsan Behzadfar, Slip behavior of high-density polyethylene at small shear stresses in the presence of esterified polyethylene glycol, Physics of Fluids, 2021.
  13. Mostafa Salehi, Mostafa Rezaei, Mahdi Salami Hosseini, Effect of silica nanoparticles on the impregnation process, foaming dynamics and cell microstructure of styrene-methyl methacrylate copolymer/n-pentane foams, Journal of Cellular Plastics, 2021.
  14. Mehdi Mostafaiyan, Sven Wießner, Gert Heinrich, Mahdi Salami Hosseini, An Improved Conservative Direct Re-Initialization Method (ICDR) for Two-Phase Flow Simulations, Fluids, 2021.
  15. Hamid Didari, Hassan Aghdasinia, Mahdi Salami Hosseini, Fatemeh Ebrahimi, Muhammad Sahimi, Identifying the optimal path and computing the threshold pressure for flow of bingham fluids through heterogeneous porous media, Transport in Porous Media, 2020.
  16. Sina Asaldoust, Mahdi Salami Hosseini, Bahram Ramezan-zadeh, Ghasem Bahlakeh, Construction of

- a unique anti-corrosion nanocomposite based on graphene oxide@Zn<sub>3</sub>PO<sub>4</sub>/epoxy; experimental characterization and detailed-theoretical quantum mechanics (QM) investigations, Construction and Building Materials, 2020.
17. Behrouz Dehghani, Mahdi Salami Hosseini, Mehdi Salami ,& Kalajahi, Neutral pH monosaccharide receptor based on boronic acid decorated poly(2-hydroxyethyl methacrylate): Spectral Methods for determination of glucose-binding and ionization constants, Microchemical Journal, 2020.
18. Ahdieh Amjadi, Mahdi Salami Hosseini, Tahereh Ashjari, Farzaneh Arbabpour Roghabadi, Vahid Ahmadi, Kiyumars Jalili, Durable perovskite UV sensor based on engineered size-tunable polydimethylsiloxane microparticles using a facile capillary microfluidic device from a high-viscosity precursor, ACS Omega, 2020.
19. Mahdi Madelatparvar, Mahdi Salami Hosseini, Farhang Abbasi, Numerical Study on Parameters Affecting the Structure of Scaffolds Prepared by Freeze-Drying Method, Iran. J. Chem. Chem. Eng., 2020.
20. Mohammad Ali Moeeni, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh, Mehdi Mostafaiyan, Numerical study on the effect of rheological parameters on the droplet deformation process in Newtonian and non-Newtonian two-phase systems using extended finite element method, Progress in Computational Fluid Dynamics, an International Journal, 2020.
21. F Mohammadzadeh Honarvar, B Pourabbas, M Salami Hosseini, M Kharazi, H Erfan , & Niya, Multi-scale simulation of SU8 and SU8-graphene nanocomposites: Bridging atomistic to macroscale peridynamics, Scientia Iranica, 2019.
22. Mostafa Salehi, Mostafa Rezaei, Mahdi Salami Hosseini, The effect of copolymer composition, gas content, and temperature on the bubbles nucleation and growth of styrene–methyl methacrylate copolymer/n-pentane foaming process, Journal of Thermoplastic Composite Materials, 2019.
23. Mehdi Mostafaiyan, Sven Wiesner, Gert Heinrich, Mahdi Salami Hosseini, Jan Domurath, Hossein Ali Khonakdar, Application of local least squares finite element method (LLSFEM) in the interface capturing of two-phase flow systems, Computers & Fluids, 2018.
24. Faraz Mohammadzadeh Honarvar, Behzad Pourabbas, Mahdi Salami Hosseini, Mahsa Kharazi, Hamid Erfan , & Niya, Molecular dynamics simulation: The effect of graphene on the mechanical properties of epoxy based photoresist: SU8, Scientia Iranica, 2018.
25. Hamid Didari, Mahdi Salami Hosseini, Reza Yegani, Investigating the viscoelastic fluid behavior in hollow fiber membrane fabrication process using Giesekus' model, Scientia Iranica, 2017.
26. Esmail Sharifzadeh, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh, Saeed Najafi, Roqaye Jannati, Zahra Hatef, Defining the characteristics of spherical Janus particles by investigating the behavior of their corresponding particles at the oil/water interface in a Pickering emulsion, Journal of Dispersion Science and Technology, 2017.
27. Mostafa Salehi, Mostafa Rezaei, Mahdi Salami Hosseini, Experimental and theoretical investigation on polystyrene/n-pentane foaming process, International Journal of Material Forming, 2017.
28. Esmail Sharifzadeh, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh, Synthesis of silica Janus nanoparticles by buoyancy effect-induced desymmetrization process and their placement at the PS/PMMA interface, Colloid and Polymer Science, 2016.
29. Esmail Sharifzadeh, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh, A temperature-controlled method to produce Janus nanoparticles using high internal interface systems: experimental and theoretical approaches, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016.
30. Amir Afshar, Mahdi Salami Hosseini, Ehsan Behzadfar, Numerical study of the agglomerates dispersion behavior in shear and elongational flow fields in viscous media using Population Balance Modeling (PBM), Scientia Iranica, 2014.
31. Masoumeh Nikdel, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini, Synthesis of poly (2-hydroxyethyl methacrylate-co-acrylic acid)-grafted graphene oxide nanosheets via reversible addition–fragmentation chain transfer polymerization, RSC Advances, 2014.
32. Seyed Ahmad Hosseini Pour, Behzad Pourabbas, Mahdi Salami Hosseini, Electrical and rheological

- properties of PMMA/LDPE blends filled with carbon black,Materials Chemistry and Physics,2014.
33. Pourya Panahian, Mehdi Salami ,& Kalajahi\*, and Mahdi Salami Hosseini,Synthesis of Dual Thermosensitive and pH-Sensitive Hollow Nanospheres Based on Poly(acrylic acid-b-2-hydroxyethyl methacrylate) via an Atom Transfer Reversible Addition–Fragmentation Radical Process,Industrial & Engineering Chemistry Research,2014.
34. Parham Roohi, Reza Alizadeh, Esmaeil Fatehifar, Mehdi Salami Hosseini,Application of Finite Element Method for Modeling of Multi-tube Fixed Bed Catalytic Reactors,Chemical Product and Process Modeling,2014.
35. Pourya Panahian, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini,Synthesis of dual thermoresponsive and pH-sensitive hollow nanospheres by atom transfer radical polymerization,Journal of Polymer Research,2014.
36. Masoumeh Nikdel, Mehdi Salami ,& Kalajahi, Mahdi Salami Hosseini,Dual thermo- and pH-sensitive poly(2-hydroxyethyl methacrylate-co-acrylic acid)-grafted graphene oxide,Colloid and Polymer Science,2014.
37. Younes Javadi, Mahdi Salami Hosseini, Mir Karim Razavi Aghjeh,The effect of carbon black and HALS hybrid systems on the UV stability of high-density polyethylene (HDPE),Iranian Polymer Journal,2014.
38. Effect of clay dispersion on the cell structure of LDPE/clay nanocomposite foams,Polymer Composites,2011.
39. M Salami Hosseini , H Nazockdast , B Dabir,Numerical simulation of aggregate dispersion in different flow fields using discrete element method,Journal of applied polymer science,2010.
40. Mahdi Salami Hosseini , Hossein Nazockdast , Patrick D Anderson , Han EH Meijer,Simulation of Agglomerate Dispersion in Cubic Cavity Flow,Macromolecular theory and simulations,2009.